

Upgrading to 2.0 from 1.3

In order to assist folks upgrading, we maintain a document describing information critical to existing Apache users. These are intended to be brief notes, and you should be able to find more information in either the New Features¹ document, or in the `src/CHANGES` file.

Topics

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See also

- Overview of new features in Apache 2.0¹

Compile-Time Configuration Changes

- Apache now uses an `autoconf` and `libtool` system for configuring the build processes². Using this system is similar to, but not the same as, using the APACI system in Apache 1.3.
- In addition to the usual selection of modules which you can choose to compile, Apache 2.0 has moved the main part of request processing into Multi-Processing Modules³ (MPMs).

Run-Time Configuration Changes

- Many directives that were in the core server in Apache 1.3 are now in the MPMs. If you wish the behavior of the server to be as similar as possible to the behavior of Apache 1.3, you should select the `prefork` MPM. Other MPMs will have different directives to control process creation and request processing.
- The proxy module⁴ has been revamped to bring it up to HTTP/1.1. Among the important changes, proxy access control is now placed inside a `<Proxy>` block rather than a `<Directory proxy:>` block.
- The handling of `PATH_INFO` (trailing path information after the true filename) has changed for some modules. Modules that were previously implemented as a handler but are now implemented as a filter may no longer accept requests with `PATH_INFO`. Filters such as `INCLUDES`⁵ are implemented on top of the core handler, and therefore reject requests with `PATH_INFO`. You can use the `AcceptPathInfo` directive to force the core handler to accept requests with `PATH_INFO` and thereby restore the ability to use `PATH_INFO` in server-side includes.
- The `CacheNegotiatedDocs` directive now takes the argument `on` or `off`. Existing instances of `CacheNegotiatedDocs` should be replaced with `CacheNegotiatedDocs on`.
- The `ErrorDocument` directive no longer uses a quote at the beginning of the argument to indicate a text message. Instead, you should enclose the message in double quotes. For example, existing instances of

```
ErrorDocument 403 "Some Message"
```

should be replaced with

```
ErrorDocument 403 "Some Message"
```

As long as the second argument is not a valid URL or pathname, it will be treated as a text

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message.

- The `AccessConfig` and `ResourceConfig` directives no longer exist. Existing instances of these directives can be replaced with the `Include` directive which has equivalent functionality. If you were making use of the default values of these directives without including them in the configuration files, you may need to add `Include conf/access.conf` and `Include conf/srm.conf` to your `httpd.conf`. In order to assure that Apache reads the configuration files in the same order as was implied by the older directives, the `Include` directives should be placed at the end of `httpd.conf`, with the one for `srm.conf` preceding the one for `access.conf`.
- The `BindAddress` and `Port` directives no longer exist. Equivalent functionality is provided with the more flexible `Listen` directive.
- Another use of the `Port` directive in Apache-1.3 was setting the port number to be used in self-referential URL's. The Apache-2.0 equivalent is the new `ServerName` syntax: it has been changed to allow specifying both the hostname *and* the port number for self-referential URL's in one directive.
- The `ServerType` directive no longer exists. The method used to serve requests is now determined by the selection of MPM. There is currently no MPM designed to be launched by `inetd`.
- The `mod_log_agent` and `mod_log_referer` modules which provided the `AgentLog`, `RefererLog` and `RefererIgnore` directives have been removed. Agent and referer logs are still available using the `CustomLog` directive of `mod_log_config`.
- The `AddModule` and `ClearModuleList` directives no longer exist. These directives were used to ensure that modules could be enabled in the correct order. The new Apache 2.0 API allows modules to explicitly specify their ordering, eliminating the need for these directives.
- The `FancyIndexing` directive has been removed. The same functionality is available through the `FancyIndexing` option to the `IndexOptions` directive.
- The MultiViews content-negotiation technique provided by `mod_negotiation` has become more strict in its default file matching. It will select only from *negotiable* files. The old behavior can be restored using the `MultiviewsMatch` directive.

Misc Changes

- The `httpd` command line option `-S` which was used for printing the virtual host configuration has been replaced by `-t -D DUMP_VHOSTS`.
- The module `mod_auth_digest`, which was experimental in Apache 1.3, is now a standard module.
- The `mod_mmap_static` module, which was experimental in Apache 1.3, has been replaced with `mod_file_cache`.
- The distribution has been completely reorganized so that it no longer contains an independent `src` directory. Instead, the sources are logically organized under the main distribution directory, and installations of the compiled server should be directed to a separate directory.

Third Party Modules

Extensive changes were made to the server API in Apache 2.0. Existing modules designed for the Apache 1.3 API will **not** work in Apache 2.0 without modification. Details are provided in the developer documentation⁶.

URI References

- [1] http://httpd.apache.org/docs-2.1/new_features_2_0.html
- [2] <http://httpd.apache.org/docs-2.1/install.html>
- [3] <http://httpd.apache.org/docs-2.1/mpm.html>
- [4] http://httpd.apache.org/docs-2.1/mod/mod_proxy.html
- [5] http://httpd.apache.org/docs-2.1/mod/mod_include.html
- [6] <http://httpd.apache.org/docs-2.1/developer/>